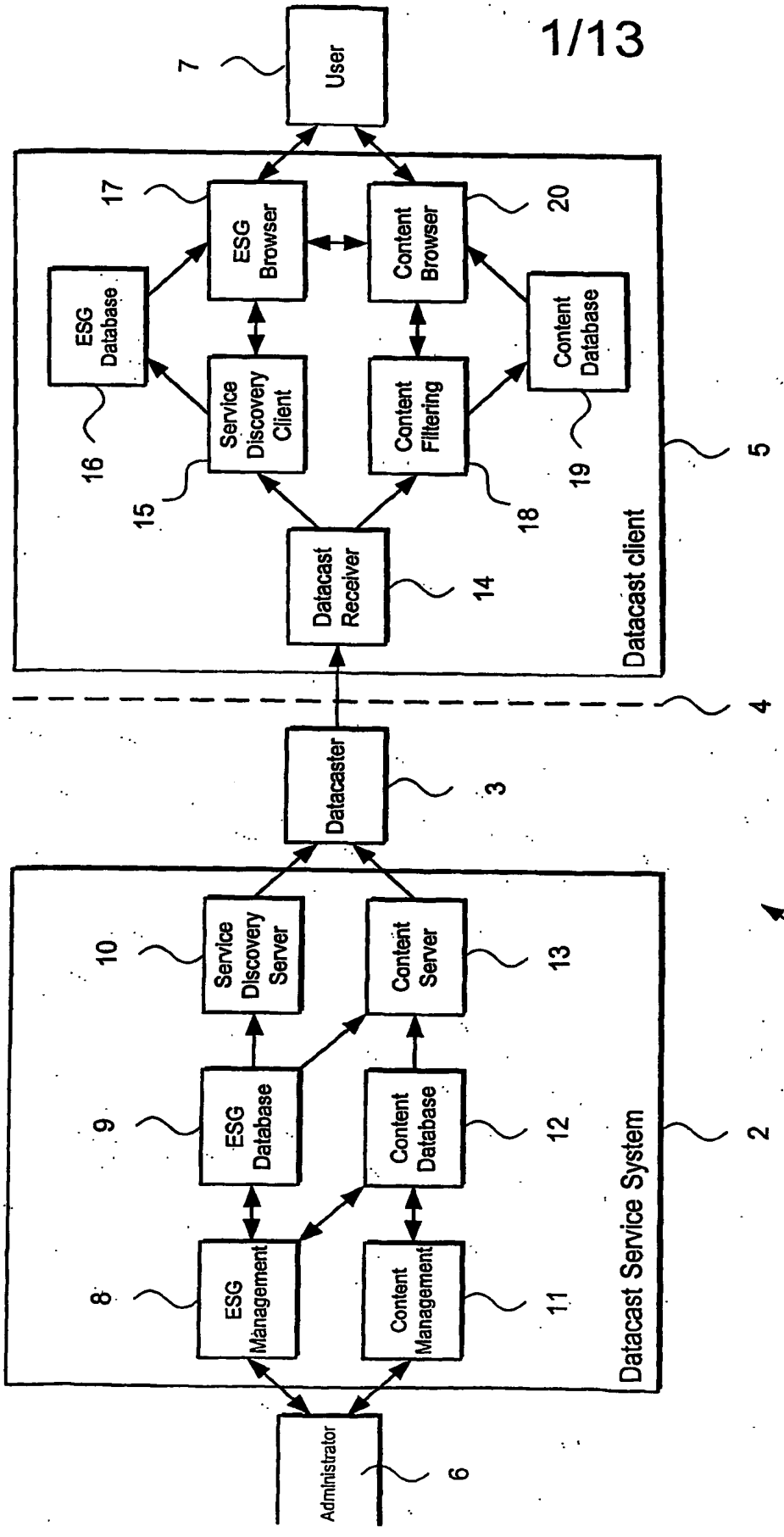
User
7
ESG Browser
17
Content Browser
20
ESG Database
16
Service Discovery Client
15
Content Filtering
18
Content Database
19
Datacast Receiver
14
Datacast client
5
4
Datacaster
3
Service Discovery Server
10
Content Server
13
ESG Database
9
Content Database
12
ESG Management
8
Content Management
11
Datacast Service System
2
1
Administrator
6

Fig. 1

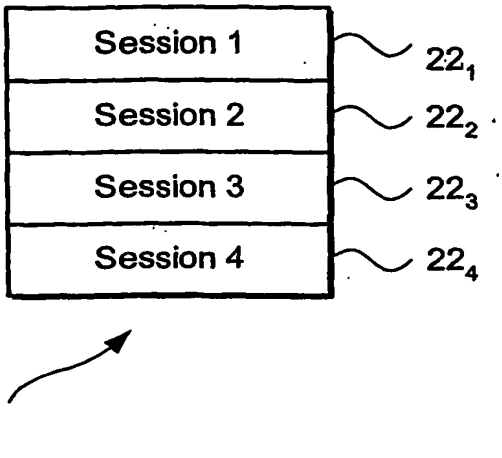

Fig. 2

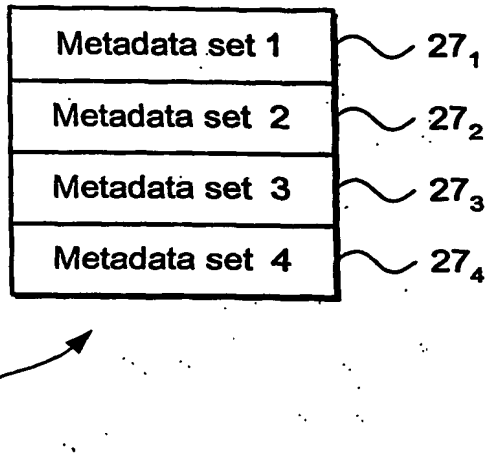

Fig. 4

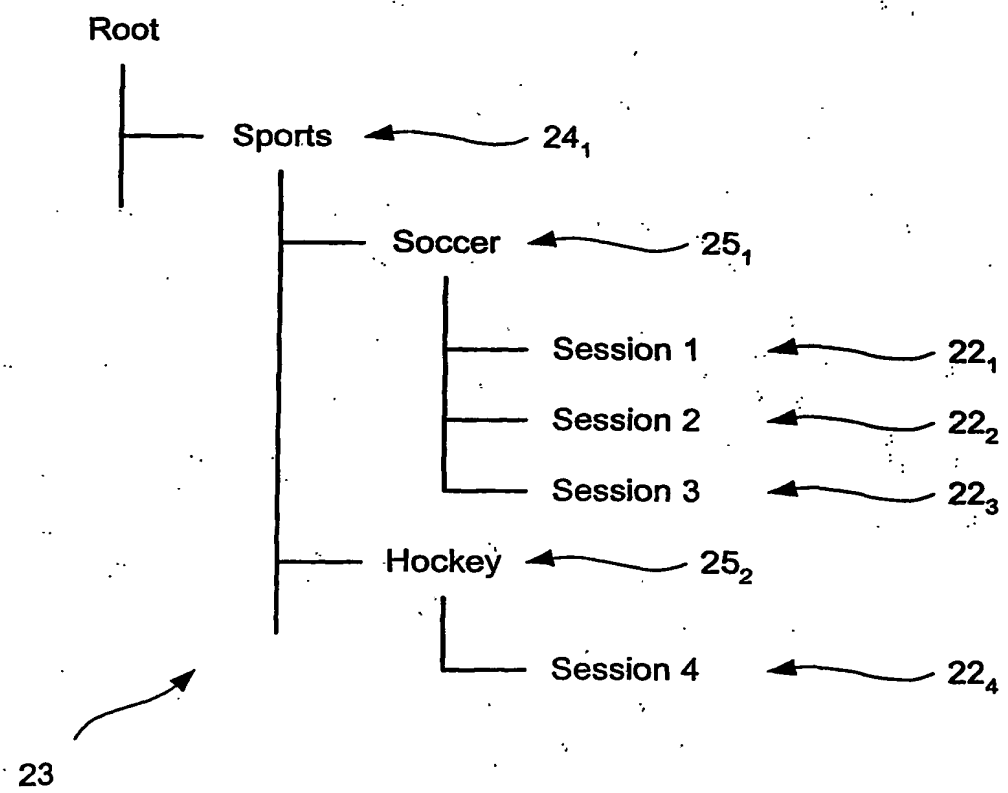

Fig. 3

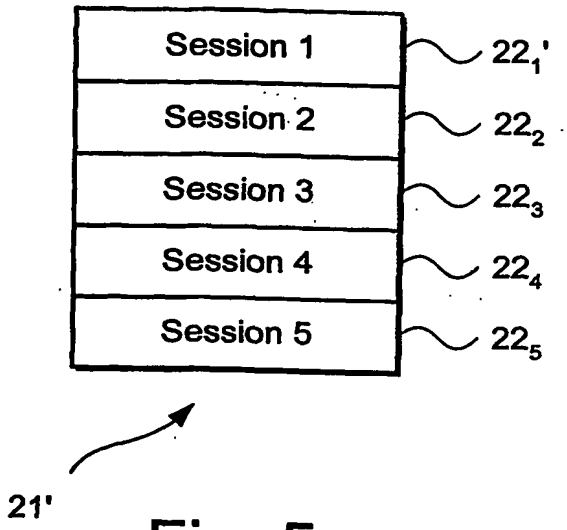

Fig. 5

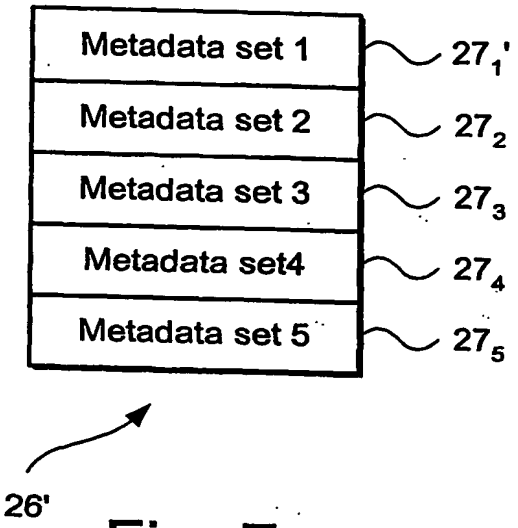

Fig. 7

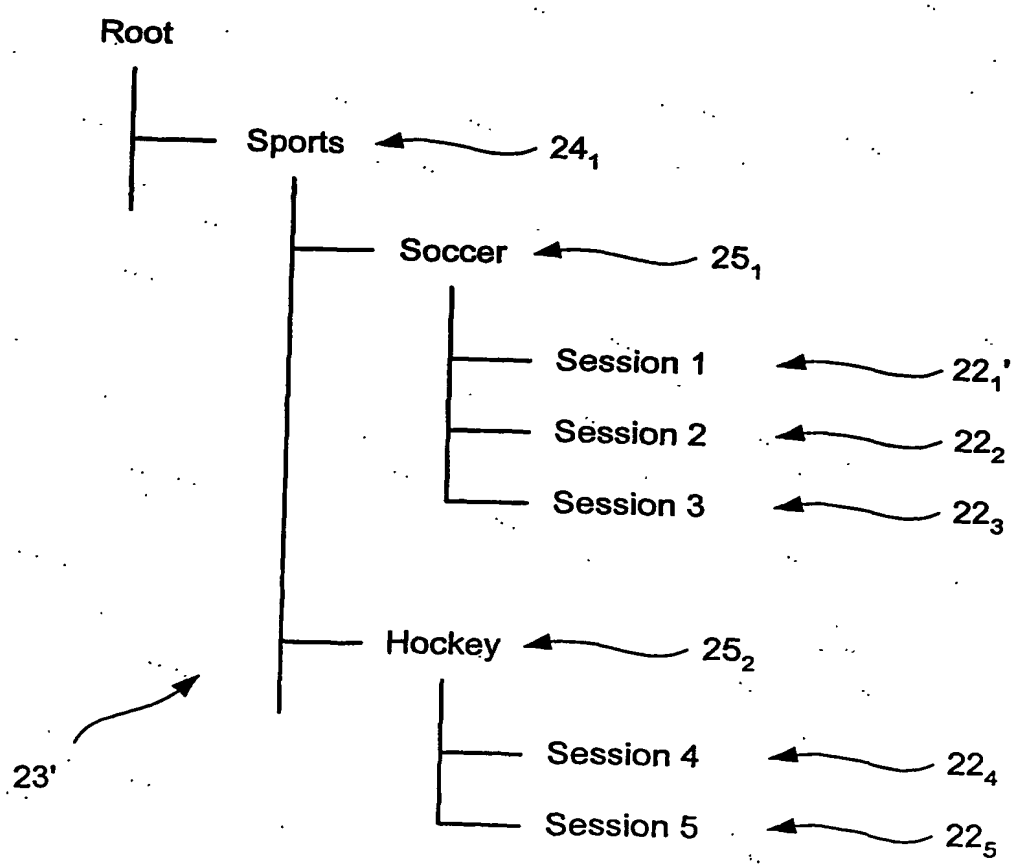

Fig. 6

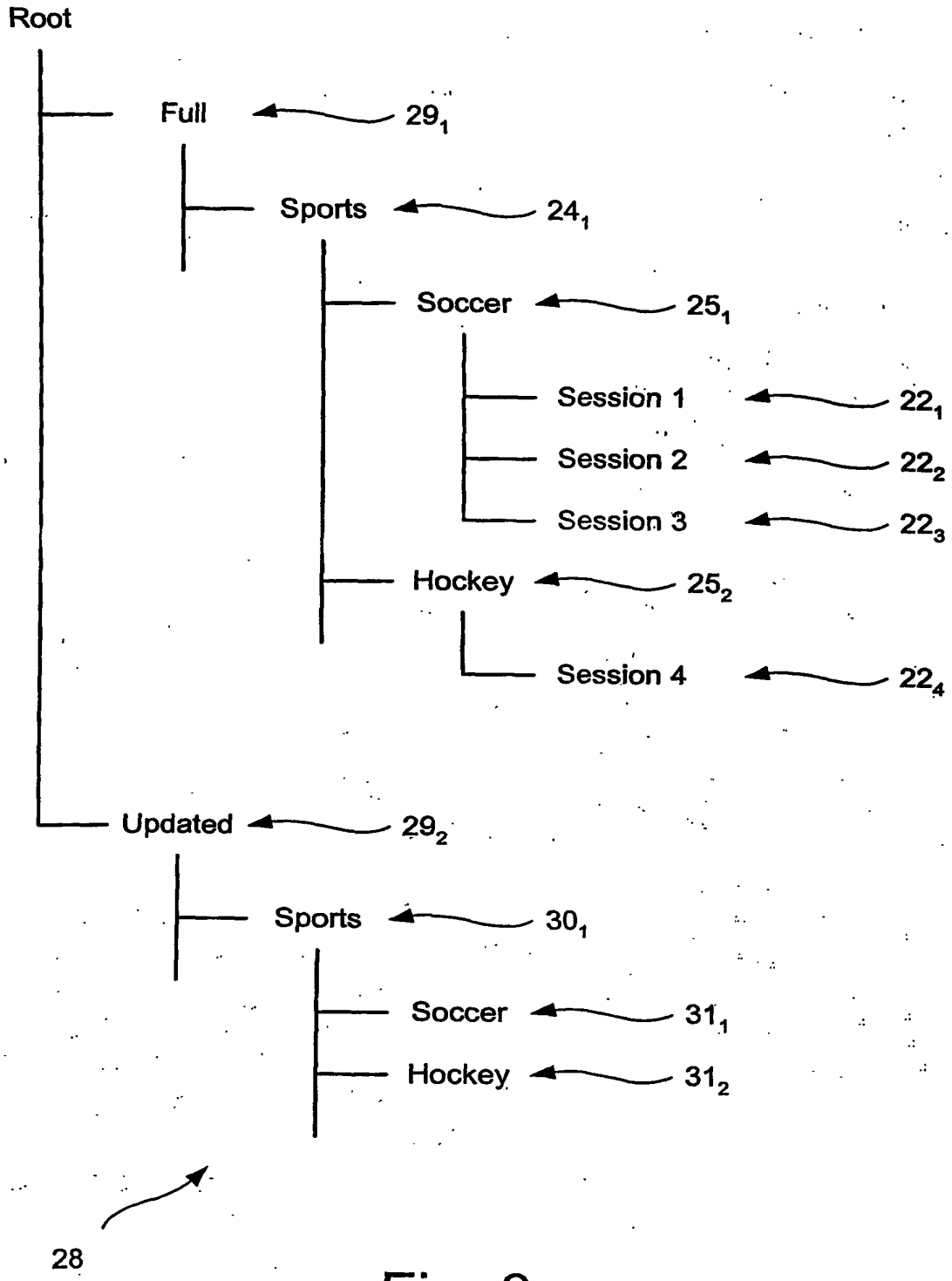
Root
Full
29_1
Sports
24_1
Soccer
25_1
Session 1
22_1
Session 2
22_2
Session 3
22_3
Hockey
25_2
Session 4
22_4
Updated
29_2
Sports
30_1
Soccer
31_1
Hockey
31_2
28

Fig. 8

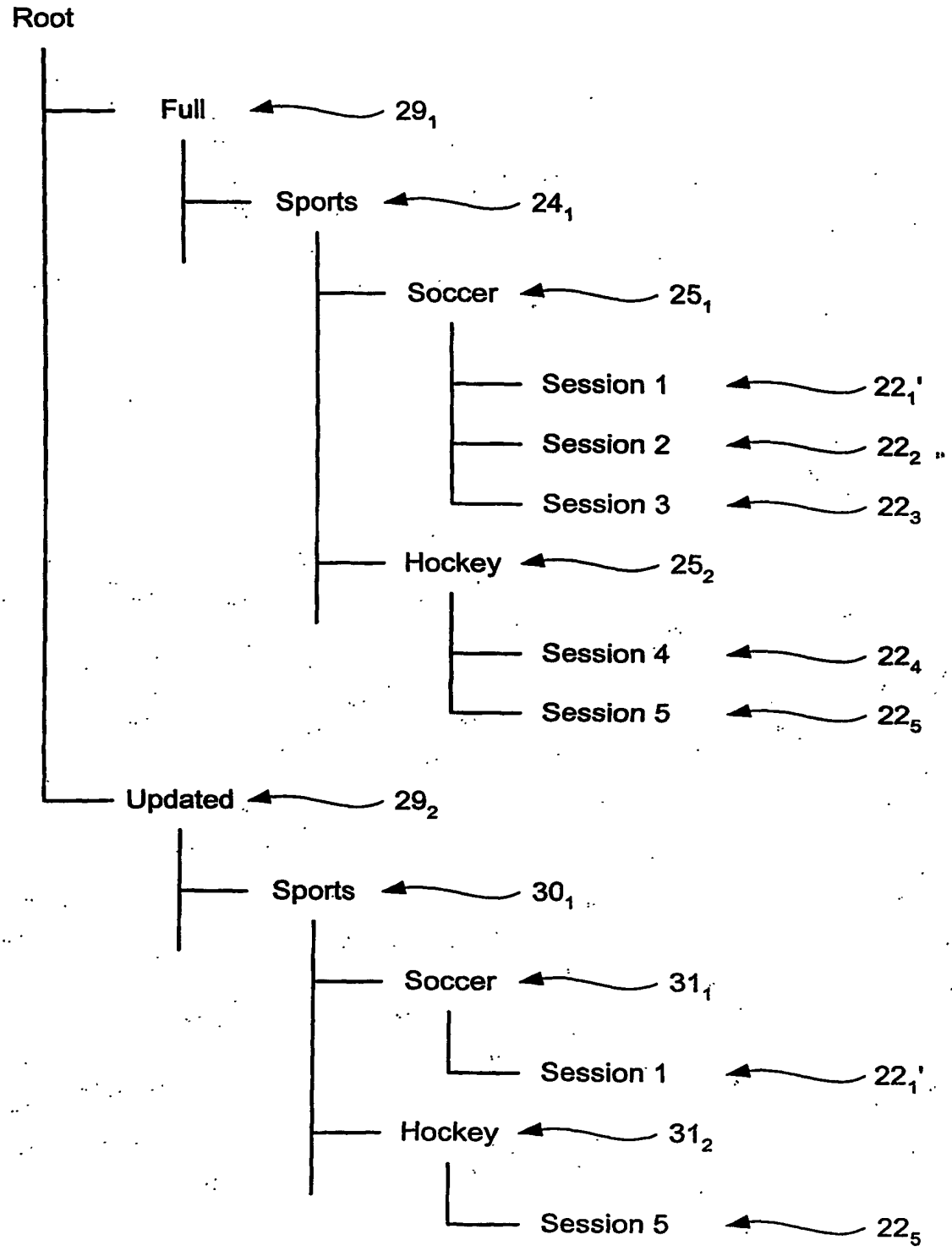
Root
Full
29_1
Sports
24_1
Soccer
25_1
Session 1
$22_1'$
Session 2
22_2
Session 3
22_3
Hockey
25_2
Session 4
22_4
Session 5
22_5
Updated
29_2
Sports
30_1
Soccer
31_1
Session 1
$22_1'$
Hockey
31_2
Session 5
22_5

Fig. 9

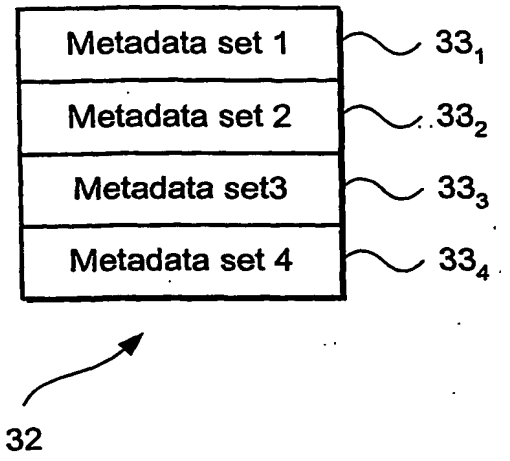

Fig. 10

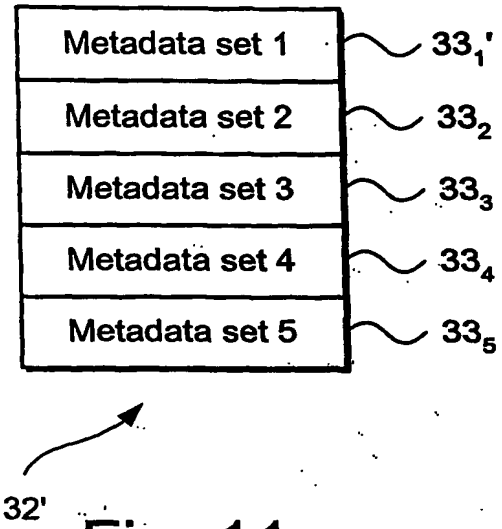

Fig. 11

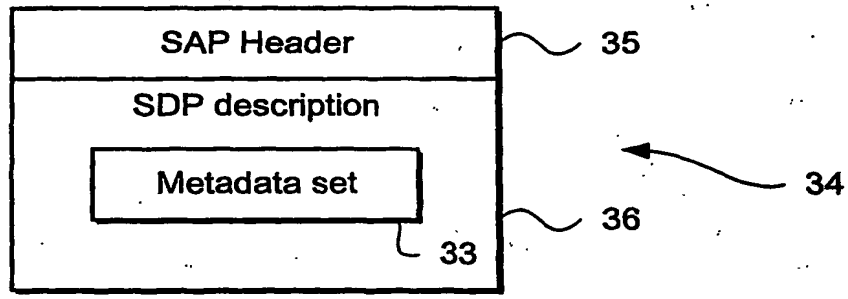

Fig. 12

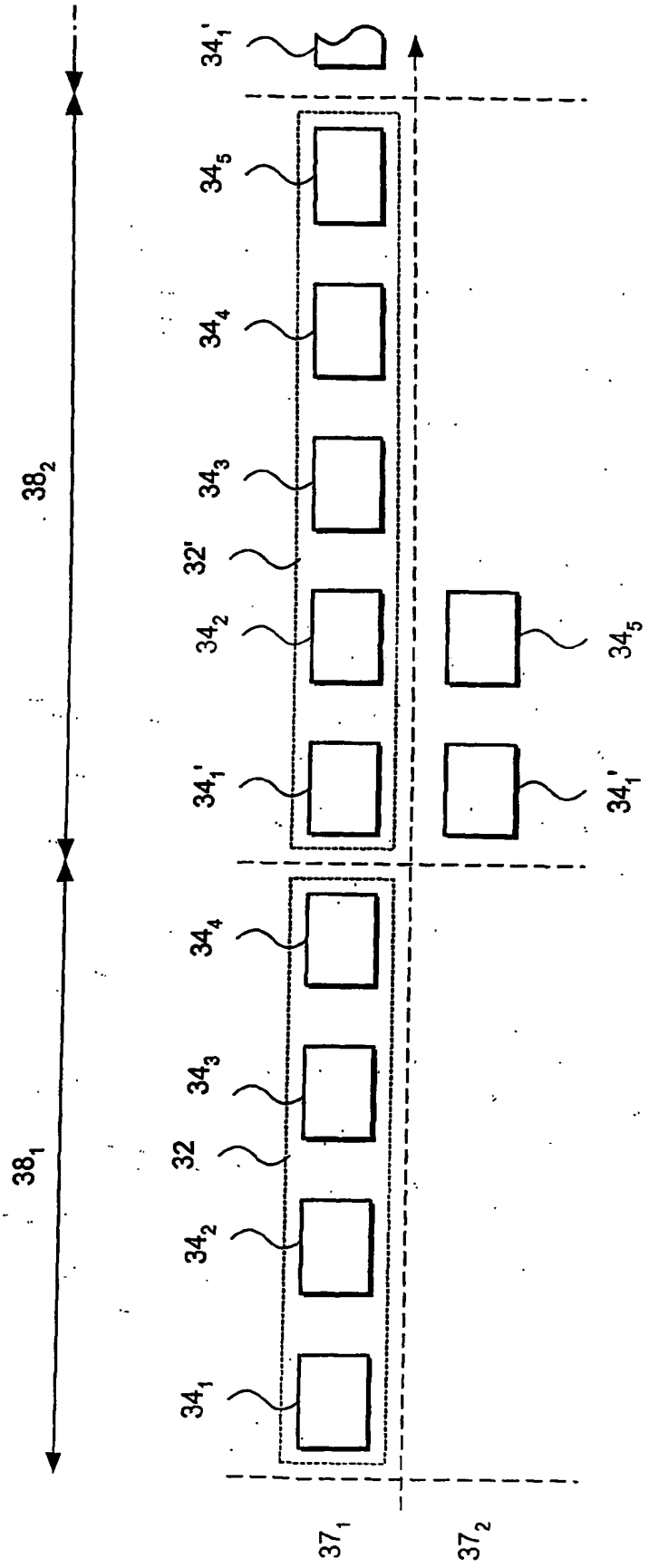
38_2
38_1
$34_1'$
34_5
34_4
34_3
32'
34_2
$34_1'$
34_5
$34_1'$
34_4
34_3
32
34_2
34_1
37_1
37_2
time

Fig. 13

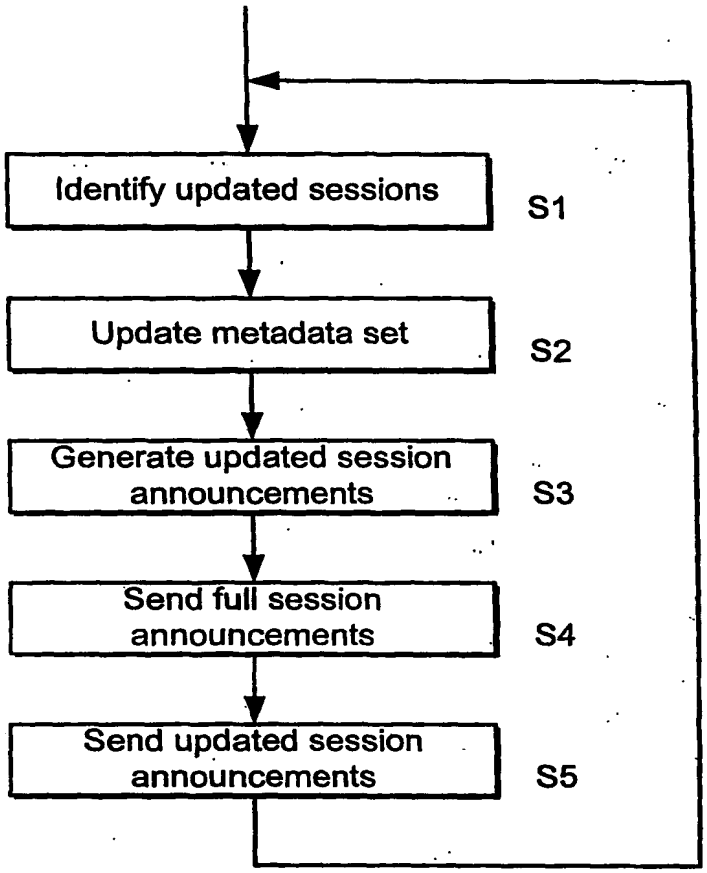
Identify updated sessions
S1
Update metadata set
S2
Generate updated session announcements
S3
Send full session announcements
S4
Send updated session announcements
S5

Fig. 14

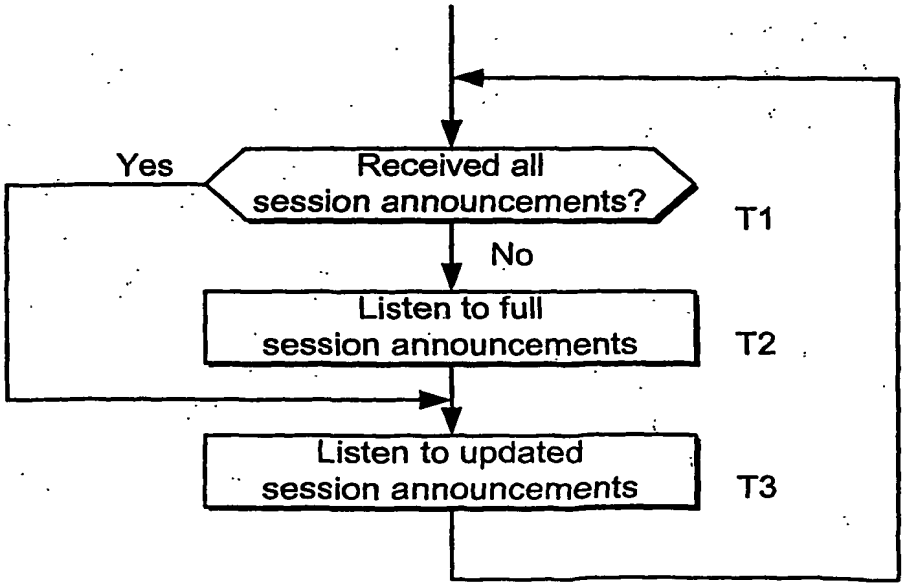
Yes
Received all session announcements?
T1
No
Listen to full session announcements
T2
Listen to updated session announcements
T3

Fig. 15

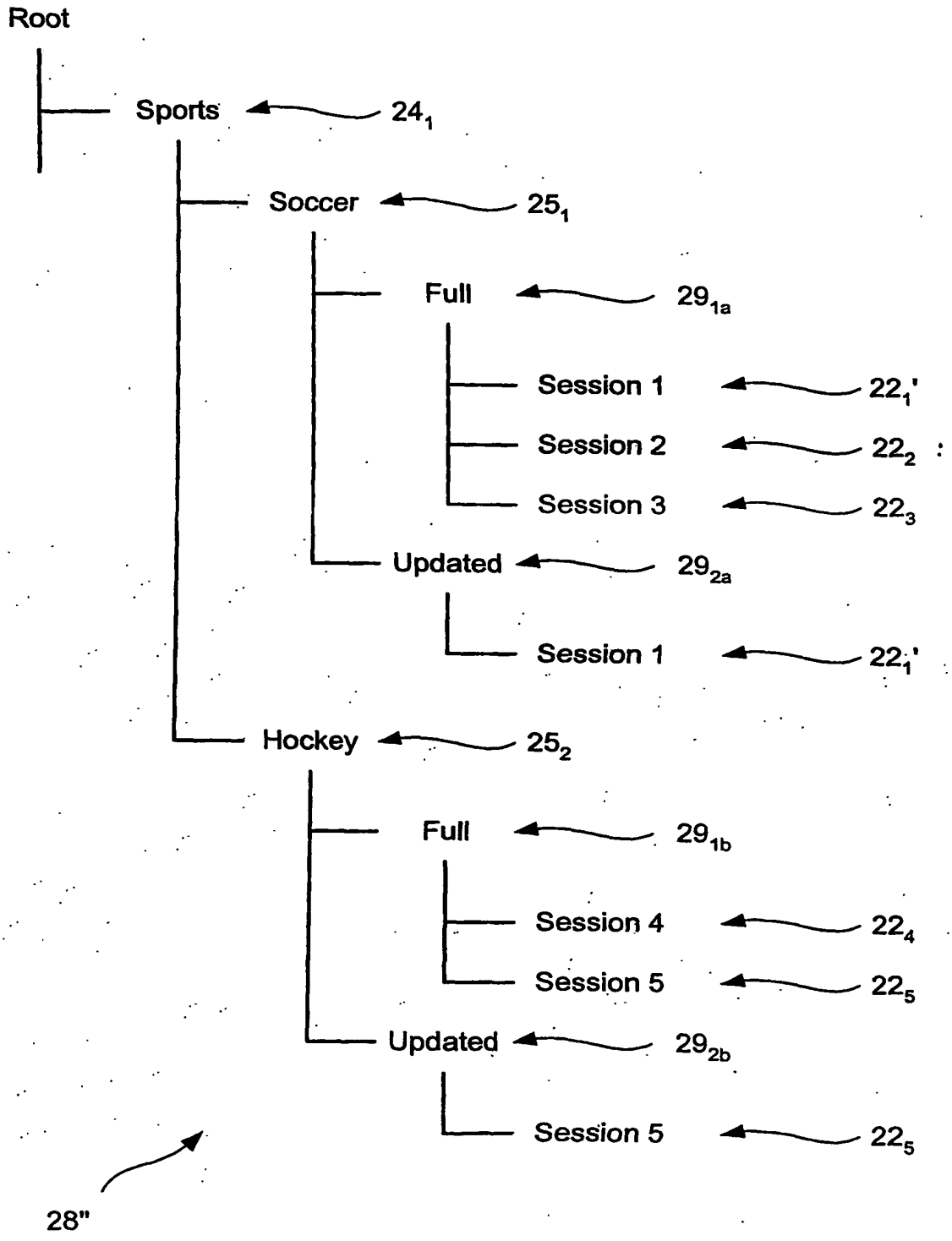
Root
Sports
24_1
Soccer
25_1
Full
29_{1a}
Session 1
$22_1'$
Session 2
22_2
Session 3
22_3
Updated
29_{2a}
Session 1
$22_1'$
Hockey
25_2
Full
29_{1b}
Session 4
22_4
Session 5
22_5
Updated
29_{2b}
Session 5
22_5
28"

Fig. 16

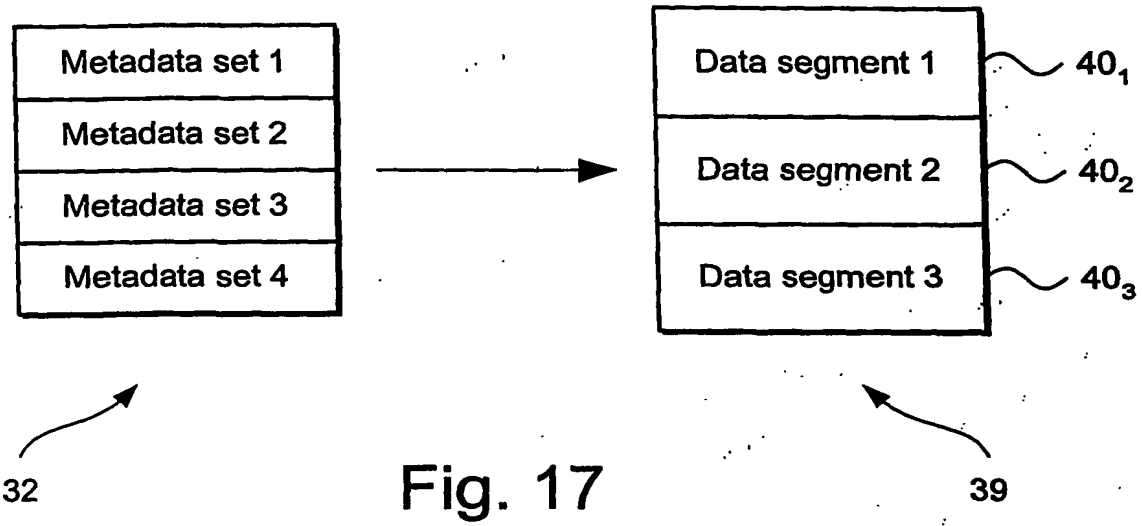
Metadata set 1
Metadata set 2
Metadata set 3
Metadata set 4
Data segment 1
Data segment 2
Data segment 3
40_1
40_2
40_3
32
39

Fig. 17

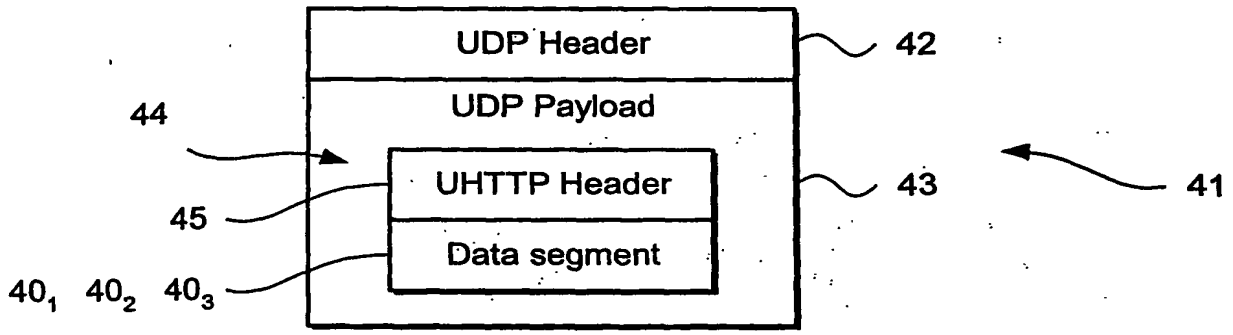
UDP Header
UDP Payload
UHTTP Header
Data segment
42
43
41
44
45
40_1 40_2 40_3

Fig. 18

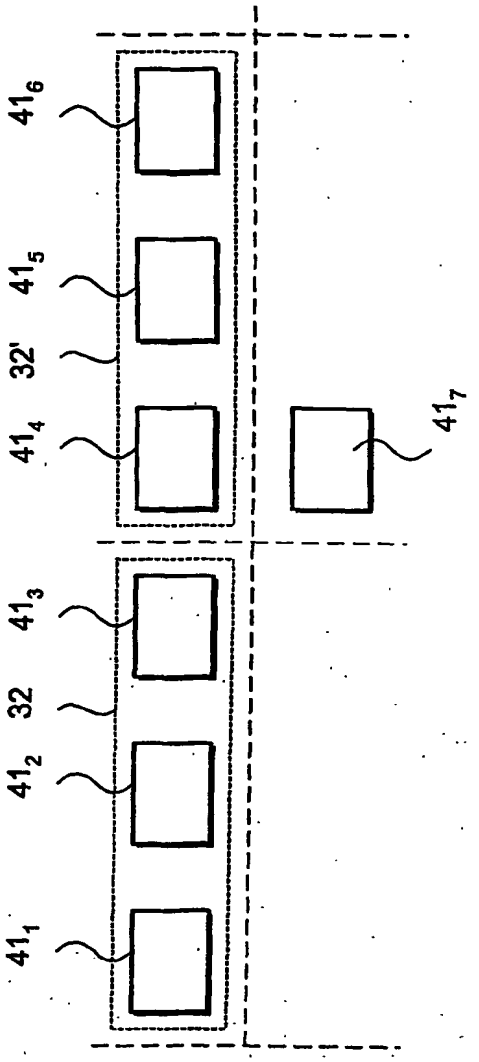
41₆
41₅
32'
41₄
41₇
41₃
32
41₂
41₁

Fig. 19

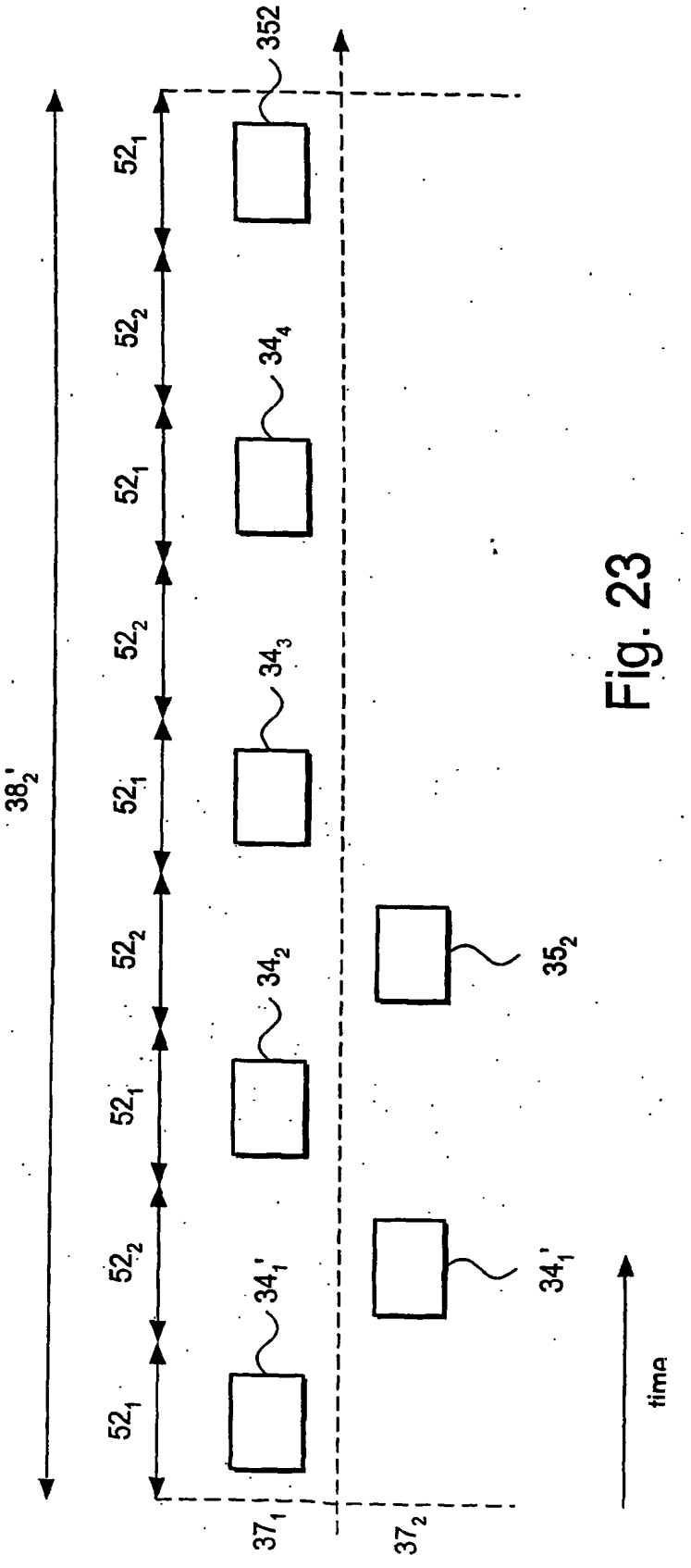
352
52₁
52₂
34₄
52₁
52₂
34₃
52₁
52₂
34₂
52₁
52₂
34₁'
52₁
38₂'
35₂
34₁'
37₁
37₂
time

Fig. 23

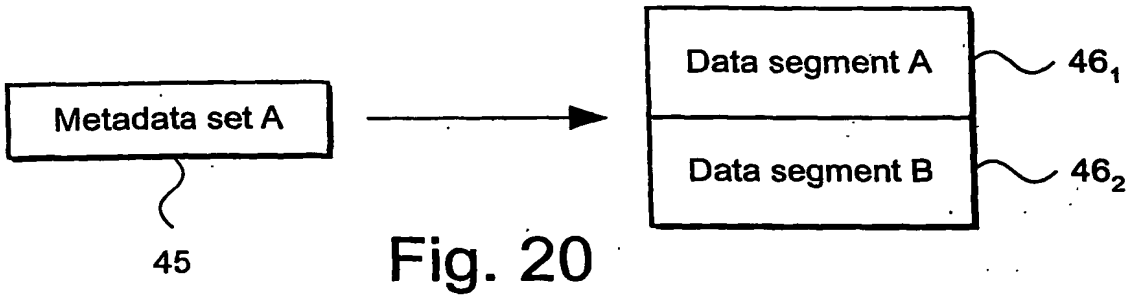

Fig. 20

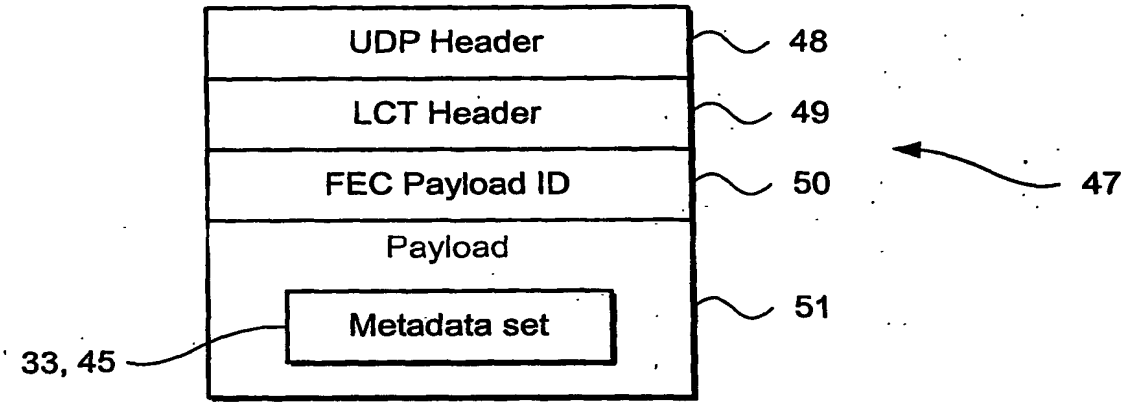

Fig. 21

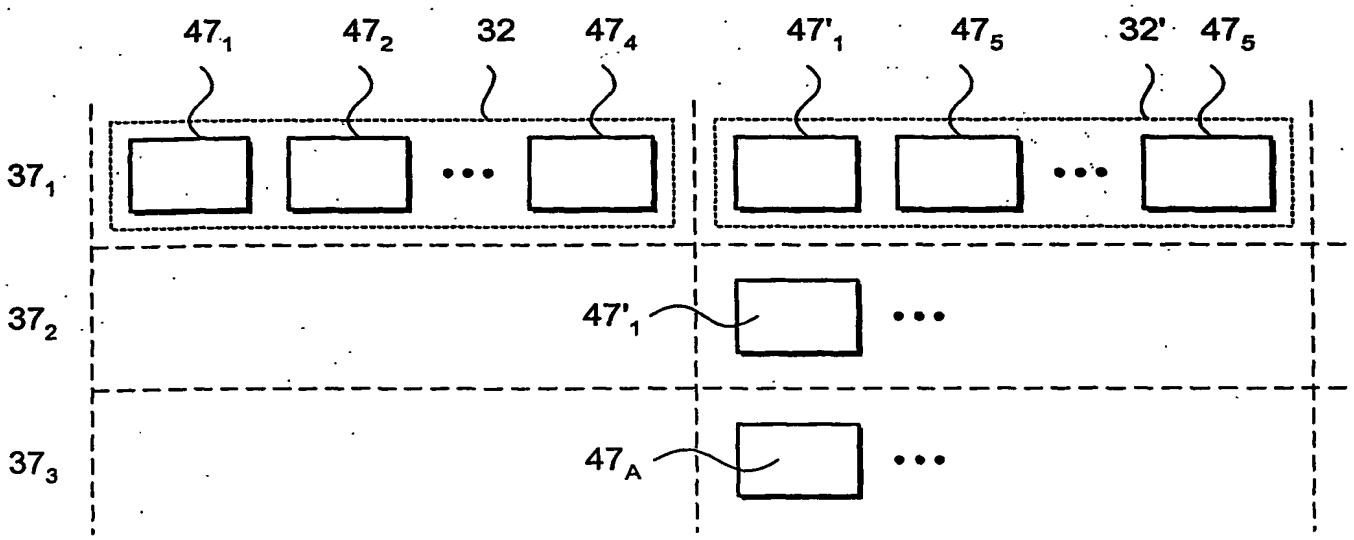

Fig. 22

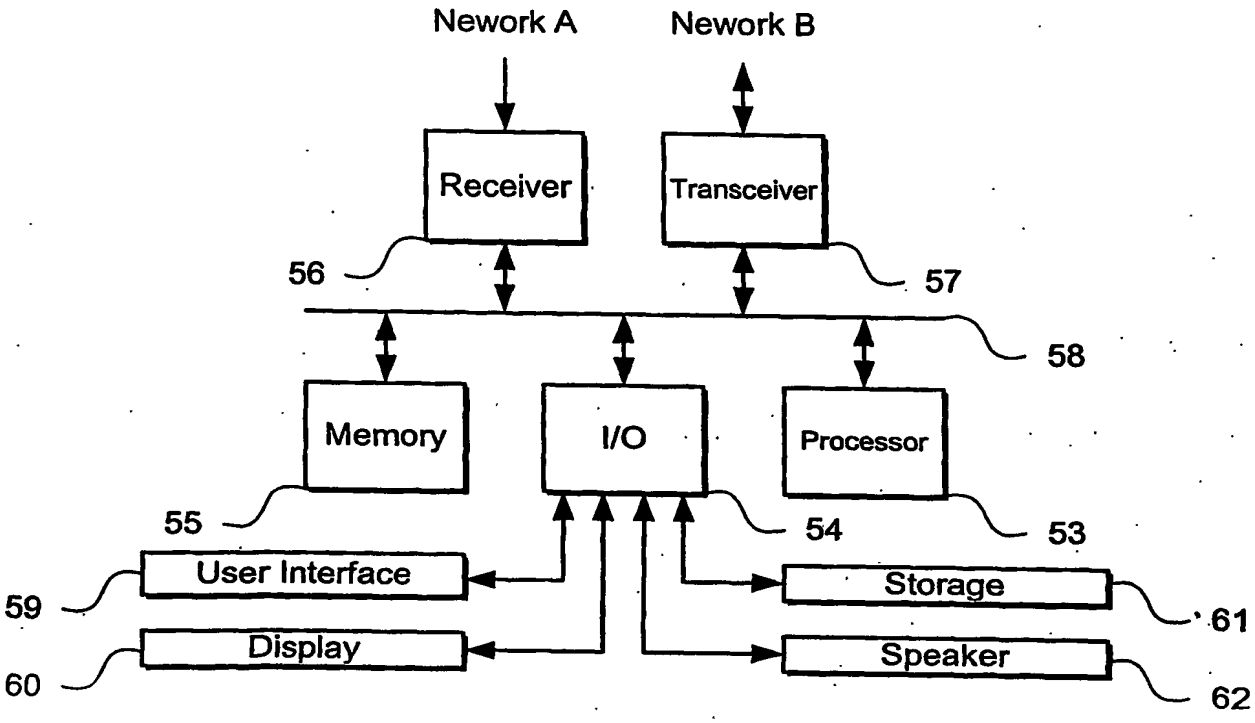
Nework A
Nework B
Receiver
Transceiver
56
57
58
Memory
I/O
Processor
55
54
53
User Interface
Storage
59
61
Display
Speaker
60
62

Fig. 24

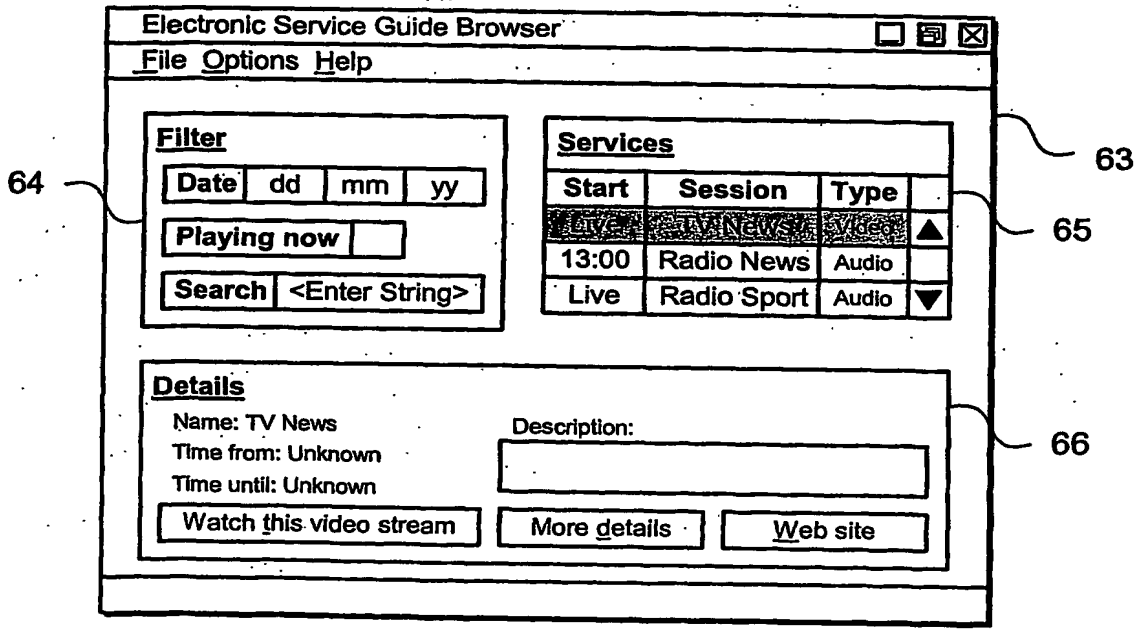
Electronic Service Guide Browser
File Options Help
Filter
Date dd mm yy
Playing now
Search <Enter String>
Services
Start Session Type
Live TV News Video
13:00 Radio News Audio
Live Radio Sport Audio
Details
Name: TV News
Time from: Unknown
Time until: Unknown
Description:
Watch this video stream
More details
Web site
63
64
65
66

Fig. 25